

SOUTHWEST FISHERIES SCIENCE CENTER
THIRD QUARTER REPORT - FY 2004
For the Period April 1 – June 30

Submitted by: Roger Hewitt, Division Director, Fisheries Resources Division

Title of accomplishment or milestone: External review of the Pacific sardine and Pacific mackerel stock assessments.

Current status: The review meeting took place during 21-25 June 2004.

Background information: Pacific sardine and Pacific mackerel stock assessments are conducted annually in support of the Pacific Fishery Management Council's management of these stocks. Both species are managed under the Council's Coastal Pelagic Species Fishery Management Plan (CPS FMP). The CPS FMP is a relatively new plan, governing CPS fisheries on the west coast of the United States only since the year 2000.

Purpose of Activity: The annual mackerel and sardine assessments are reviewed by the Council's Scientific and Statistical Committee (SSC) during the Council's June and November meetings, respectively. Typically, the SSC reviews these assessments amidst a wide variety of other Council topics on its 2-day meeting agenda; and the Council sets harvest guidelines (quotas) based on the assessment results within a day or two following the SSC's deliberations. The SSC recommended and the Council concurred that a more in-depth review would be beneficial – not only to review the assessment methods employed but with equal importance, to review the adequacy of the research efforts that support the stock assessments. Subsequently, a stock assessment review (STAR) was scheduled for 21-25 June 2004 in La Jolla, CA.

Description of accomplishment and significant results: In preparation for the STAR, a comprehensive review of all sardine and mackerel data sources and previous analyses was conducted by SWFSC-FRD staff. New and improved stock assessment models were developed and applied to both sardine and mackerel. Stock assessment documents and a comprehensive package of background documents were prepared and distributed to the STAR panel members in advance of the 21-25 June meeting. The process of selecting panel members and making arrangements for the meeting was a joint effort involving the SSC, Council staff, Center for Independent Experts, and FRD. The STAR panel completed a first draft of a report detailing their findings during the 21-25 June meeting; and finalized the consensus report shortly afterwards. The STAR panel report, along with the new assessment papers, will be presented to the Council at its September 2004 meeting in San Diego.

Significance of accomplishment: The STAR panel comprised international experts on both CPS assessment and state-of-the-art stock assessment methodologies. With minor suggestions for improvement, the panel endorsed the new stock assessment methods that were developed for sardine and mackerel, and generally concurred on all aspects of the analyses presented by FRD staff. The panel also provided significant guidance on the requisite research efforts that need to be initiated to ensure that future stock assessments more fully meet the Council's needs (e.g. international synoptic surveys using acoustics and other new initiatives). The latter

recommendations provide an invaluable framework for the long overdue improvements needed to support CPS management on the west coast of the United States.

Problems: Considerable new funding and/or re-direction of current NMFS funding will be necessary to accomplish the STAR Panel's recommendations for future stock assessment and management of Pacific sardine and Pacific mackerel resources.

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